# **TOSHIBA** MATERIAL SAFETY DATA SHEET

Date of Preparation : January 31, 2002 Date of Revised :

SECTION 1 CHEMICAL	PRODUCT AND COMPANY IDENTIFICATION
Product Name	: T-FC31-C Cyan Toner
Used for	: FC-210/310 Toshiba Copier
Company Name	: Toshiba TEC Corporation
Address	: 1-1, Kanda nishikichou, Chiyoda-ku, Tokyo 101-8442, Japan
Telephone Number	: +81-3-3438-6854
Manufacturer Name	: (1) Toshiba TEC Corporation, Mishima Works
	6-78, Minami-cho, Mishima-shi, Shizuoka-ken, 411-8520 Japan

Contact	: (1) Toshiba America Information Systems, Inc.			
	Emergency Tel. No.	: 800-424-9300		
		For calls within the U.S. only.		
	(2) Toshiba of Canada Limited			
	Tel. No. : 905-405-3500	For calls within Canada only.		
	(3) Toshiba TEC Germany Imaging S	Systems GmbH		
	Tel. No. : +49-2131-158-01			
	(4) Toshiba (Australia) Pty, Ltd.			
	Tel. No.: +61-2-98873322			

#### SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT(S)</u>	CAS No.	<u>wt.%</u>	OSHA PEL	ACGIH TLV
Polyester resin			Not listed	Not listed
Organic Pigment			Not listed	Not listed
wax			Not listed	Not listed
silica	68909-20-6	2 - 4	Not listed	Not listed
Titanium-dioxide	220037-19-4	<2	Not listed	Not listed

--- : TRADE SECRET

#### SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview : Product is stable, nonflammable powder. If used as intended, the product does not present an acute or chronic health hazard. **Physical Hazards** : This product is not classified as flammable or combustible. It will burn in case of fire. Avoid contact with strong oxidizers such as chromate, bromate and nitrates. Routes of Exposure : Inhalation, dermal contact, incidental ingestion Inhalation : Excessive inhalation may cause irritation of the nose, throat and respiratory tract. Eye Contact : Not an irritant. Dermal Contact : Not an irritant: not a sensitizer. Ingestion : None currently known. Chronic Effects/Carcinogenicity : See Section 11 Supplemental Health Information. Reproductive/Developmental: None identified.

MATERIAL SAFETY DATA SHEET MSDS No. TFC31CWJ1W

Product Identity :	T-FC31-C Cyan Toner	Page 2 of 5
Target Organs	<ul> <li>Prolonged breathing of high concentrations m adverse effects on the respiratory system.</li> </ul>	ay cause
Signs and Symptoms of	of Exposure : Prolonged exposure to dus respiratory system.	sts of this product may irritate the
Medical Conditions Ag	gravated by Exposure to This Product :	
	Respiratory disorders, such as asthma, may be exposure to high concentrations of this produced the second s	

#### SECTION 4 FIRST AID MEASURES

Eye Contact	: Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, call a physician.
Skin Contact	: Wash with soap and water. Wash clothing before reuse. If irritation occurs or is persistent, seek medical attention.
Ingestion Inhalation	<ul> <li>Dilute stomach contents with several glasses of water.</li> <li>Remove from exposure area to fresh air immediately. Contact a physician if there is any difficulty in breathing or other signs of distress.</li> </ul>

## SECTION 5 FIRE FIGHTING MEASURES

<u>S</u>
not burn in case of fire.
ble
ble
plicable
plicable
n, carbon dioxide, dry chemical & water fog.
Combustible powder. Dust of this product at sufficient concentrations can form explosive mixtures with air.
Carbon monoxide, carbon dioxide and smoke.
<u>E MEASURES</u>
an spilled toner and carefully transfer into sealable waste

or Leaks : Vacuum-clean spilled toner and carefully transfer into sealable waste container. If no vacuum-cleaner is available, sweep slowly to minimize generation of dust during clean-up. Residue can be removed with soap and cold water.

#### SECTION 7 HANDLING AND STORAGE

Handling	: Avoid dust, keep	away from ignition sources.
Prevention of Fire a	ind Explosion :	This material is capable of creating a dust explosion. Keep away from heat, sparks & flame.
Storage Hygienic Practices	: Avoid inhalation	n cool and dry area. and ingestion. Avoid getting in eyes, on skin or clothing. roughly after handling, and before eating, drinking, or

MATERIAL SAFETY DATA SHEET MSDS No. TFC31CWJ1W

Product Identity :	T-FC31-C Cyan Toner	Page 3 of 5
SECTION 8 EXPOSUR	E CONTROLS/PERSONAL PROT	ECTION
Exposure Limits	: OSHA (TWA/PEL as the product)	15mg/m <sup>3</sup> (Total dust)
		5mg/m <sup>3</sup> (Respirable dust)
	ACGIH(TWA/TLV as the product)	10mg/m <sup>3</sup> (Total dust)
	DFG-MAK	6mg/m <sup>3</sup> (Total dust)
Engineering Controls	: Maintain adequate ventilation.	
Eye Protection	: Not required under intended use.	
Skin Protection	: Not required under intended use.	
Respiratory Protection	: Not required under intended use.	

### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

	Appearance	:	Fine solid powder
	Color	:	Cyan
	Scent	:	Odorless
	Melting Point	:	110C - 150C (Softening point)
	Specific Gravity(H <sub>2</sub> O=1)	:	1.1 - 1.5
	Vapor Pressure	:	Not applicable
	Vapor Density (Air=1)	:	Not applicable
	Evaporation Rate	:	Not applicable
	Solubility in Water	:	Negligible
	pH Value	:	Not a water-based product, therefore not applicable.
SF	CTION 10 STABILITY A	ND	REACTIVITY
	Stability	:	Stable
	Incompatibility	:	None identified.
		on P	Products : Carbon monoxide and carbon dioxide.
	Hazardous Polymerizatior		Will not occur.
	-		
SE	CTION 11 SUPPLEME	NTA	L HEALTH INFORMATION
	Acute oral toxicity	:	LD50 is greater than 5,000mg/kg.
			· · · · · · · · · · · · · · · · · · ·
			(Estimated from other products containing same materials)
	Acute inhalation	:	
		:	(Estimated from other products containing same materials)
		:	(Estimated from other products containing same materials) LC50(4H) is in excess of 5.00mg/l.
		:	(Estimated from other products containing same materials) LC50(4H) is in excess of 5.00mg/l. (This was the highest attainable concentration.)
	Acute inhalation Eye irritation	:	<ul><li>(Estimated from other products containing same materials)</li><li>LC50(4H) is in excess of 5.00mg/l.</li><li>(This was the highest attainable concentration.)</li><li>(Estimated from other products containing same materials)</li></ul>
	Acute inhalation	:	<ul> <li>(Estimated from other products containing same materials)</li> <li>LC50(4H) is in excess of 5.00mg/l.</li> <li>(This was the highest attainable concentration.)</li> <li>(Estimated from other products containing same materials)</li> <li>Non irritant.</li> <li>(Estimated from other products containing same materials)</li> <li>Non irritant.</li> </ul>
	Acute inhalation Eye irritation Skin irritation	:	<ul> <li>(Estimated from other products containing same materials)</li> <li>LC50(4H) is in excess of 5.00mg/l.</li> <li>(This was the highest attainable concentration.)</li> <li>(Estimated from other products containing same materials)</li> <li>Non irritant.</li> <li>(Estimated from other products containing same materials)</li> <li>Non irritant.</li> <li>(Estimated from other products containing same materials)</li> </ul>
	Acute inhalation Eye irritation	:	<ul> <li>(Estimated from other products containing same materials) LC50(4H) is in excess of 5.00mg/l.</li> <li>(This was the highest attainable concentration.)</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non sensitization.</li> </ul>
	Acute inhalation Eye irritation Skin irritation Skin sensitization	:	<ul> <li>(Estimated from other products containing same materials) LC50(4H) is in excess of 5.00mg/l.</li> <li>(This was the highest attainable concentration.)</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non sensitization.</li> <li>(Estimated from other products containing same materials)</li> </ul>
	Acute inhalation Eye irritation Skin irritation	:	<ul> <li>(Estimated from other products containing same materials) LC50(4H) is in excess of 5.00mg/l.</li> <li>(This was the highest attainable concentration.)</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non sensitization.</li> </ul>
	Acute inhalation Eye irritation Skin irritation Skin sensitization	:	<ul> <li>(Estimated from other products containing same materials) LC50(4H) is in excess of 5.00mg/l.</li> <li>(This was the highest attainable concentration.)</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non sensitization.</li> <li>(Estimated from other products containing same materials)</li> </ul>
	Acute inhalation Eye irritation Skin irritation Skin sensitization Mutagenicity Carcinogenicity	:	<ul> <li>(Estimated from other products containing same materials) LC50(4H) is in excess of 5.00mg/l.</li> <li>(This was the highest attainable concentration.)</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non sensitization.</li> <li>(Estimated from other products containing same materials) Non sensitization.</li> <li>(Estimated from other products containing same materials) Negative in the Ames test.</li> </ul>
	Acute inhalation Eye irritation Skin irritation Skin sensitization Mutagenicity	:	<ul> <li>(Estimated from other products containing same materials) LC50(4H) is in excess of 5.00mg/l.</li> <li>(This was the highest attainable concentration.)</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non irritant.</li> <li>(Estimated from other products containing same materials) Non sensitization.</li> <li>(Estimated from other products containing same materials) Non sensitization.</li> <li>(Estimated from other products containing same materials) Negative in the Ames test.</li> </ul>

Product Identity :

T-FC31-C Cyan Toner

Page 4 of 5

#### SECTION 12 ECOLOGICAL INFORMATION

This material has not been tested concerning environmental effects (fish toxicity, bird toxicity, invertebrate toxicity, phyto-toxicity and environmental fate).

#### SECTION 13 DISPOSAL CONSIDERATION

Dispose of in accordance with local, state and federal regulation. Empty plastic container may be recycled.

#### SECTION 14 TRANSPORTATION INFORMATION

Special Precautions	:	None
International Transport Information		
UN Classification Number	:	Not applicable
DOT Identification Number	:	Not applicable
Domestic Transportation	:	Not applicable
Other Information	:	Not applicable

#### SECTION 15 REGULATORY INFORMATION

CTION 13 REGULATORT INFORMATION
US/Canada Information
OSHA Hazard Communication Standard, 29CFR 1910. 1200 : Not regulated
Toxic Substance Control Act (TSCA): All chemical substances in this product comply
with all applicable rules or orders under TSCA.
RCRA (40 CFR 261) : Product or components not listed.
CERCLA/SARA Information : Not regulated.
NTP Annual Report on Carcinogens : Not listed as an NTP carcinogen.
IARC : See section 11.
California Proposition 65 : Neither toner, or any of the components, are listed as chemicals known to the State of California to cause cancer or reproductive system effects.
Controlled Products Regulations(Canada) :
This product has been classified in accordance with the hazard criteria of the CPR.
Other State Regulations : None
U.S./Canada Label Statements:
LOW HAZARD FOR RECOMMENDED HANDLING. Minimize dust
generation and accumulation. Use with adequate ventilation.
EU Information
Label Information According to Directives 67/548 EEC & 88/379 EEC :
Symbol & Indication : Not required
Risk Phrase : Not required
Safety Advise Phrase : Not required
EEC Directive(76/548 EEC, 79/831 EEC, 92/32 EEC) :
All chemical substances in this product comply with all
applicable rules or order under EEC Directive.
The Subject of Specific Provisions in Relation to Protection of Man
or the Environment. Directive 76/769/EEC : Not required
National requirement : No specific regulations or restrictions.

MATERIAL SAFETY DATA SHEET MSDS NO. TEC31CWJ1W

**Product Identity :** 

T-FC31-C Cyan Toner

Page 5 of 5

:

#### SECTION 16 OTHER INFORMATION

National Fire Pro	tection Association (	(NFPA) Classification
	Flammability	: 1
	Reactivity	: 0
	Health	: 0
	(0 = insignificant,	1 = slight)
Hazardous Mater	ials Information Sys	tems (HMIS) :
	Red (Flammability)	: 1
	Yellow (Reactivity)	: 0
	Blue (Acute Effects	) : 0
	(0 = insignificant,	1 = slight )
Notice	Judgments as to the	suitability of information ber

Judgments as to the suitability of information herein for purchaser's purposes are NOLICE necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Toshiba Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes

References :	None
--------------	------

Abbreviation :

- (1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).
- (2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).
- (3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.
- (4) TWA stands for Time Weighted Average.
- (5) IARC stands for International Agency for Research on Cancer.
- (6) NTP stands for National Toxicology Program (USA).
- (7) NIOSH stands for National Institute for Occupational Safety and Health (USA).
- (8) DOT stands for Department of Transportation (USA).

#### Prepared by Toshiba TEC Corporation : **Quality Assurance Department** 6-78, Minami-cho, Mishima-shi, Shizuoka-ken, 411-8520, Japan